CLAIMS:

1. A packet transmission method in a telecommunication network, the method comprising:

transmitting, in a network, packets of different priority on at least some connections,

estimating a value for a quality of service required for sending high priority packets with a given successful decoding probability, and

controlling an interference in the network such that the quality of service for at least one connection has at least the estimated value.

2. The method of claim 1, comprising:

estimating a maximum value for a maximum interference level allowed to send high priority packets with a given successful decoding probability, and

controlling the interference in the network such that an interference level is below the estimated maximum interference level.

3. The method of claim 1, comprising:

wherein the controlling step comprises controlling the interference by controlling a number of active connections in the network.

4. The method of claim 1, further comprising:

controlling transmission powers of connections in the network.

5. The method of claim 1, further comprising:

estimating, for at least one connection including high priority packets, a maximum value for a maximum interference level allowed to send high priority packets with a given successful decoding probability, and

controlling the interference in the network such that an interference level is below a lowest estimated maximum interference level tolerated by connections in the network.

6. The method of claim 1, further comprising:

allocating a given amount of resources of the network for at least one connection for transmitting the packets of the at least one connection,

transmitting high priority packets using the allocated resources, and

transmitting low priority packets using the allocated resources if there is a sufficient amount of capacity, and if the sufficient amount of capacity is not available, transmitting the low priority packets using resources shared between all connections.

7. An arrangement for packet transmission in a telecommunication network, the arrangement comprising at least two network entities having a connection utilizing packet transmission and the at least two network entities being configured to transmit packets of different priority, the network comprising:

first estimating means for estimating a value for a quality of service required for sending high priority packets with a given successful decoding probability, and

first controlling means for controlling an interference in a network such that the quality of service for at least one connection has at least the estimated value.

8. The arrangement of claim 7, further comprising:

second estimating means for estimating a maximum value for a maximum interference level allowed for send high priority packets with a given successful decoding probability, and

first controlling means for controlling the interference in the network such that an interference level is below an estimated interference level.

9. The arrangement of claim 7, wherein the first controlling means controls the interference by controlling a number of active connections in the network.

10. The arrangement of claim 7, further comprising:

second controlling means for controlling the transmission powers of the active connections in the network.

11. The arrangement of claim 7, further comprising:

allocating means for allocating a given amount of resources of the network for at least one connection for transmitting packets of the at least one connection,

first transmitting means for transmitting high priority packets using the allocated resources, and

second transmitting means for transmitting low priority packets using the allocated resources if there is a sufficient amount of capacity, and if the sufficient amount of capacity is not available, transmitting the low priority packets using resources shared between all connections.

12. A network element in a radio telecommunication network, the network element being configured to:

control radio resources for connections utilizing packet transmission, wherein the packet transmission comprises packets of different priorities;

estimate a value for a quality of service required for the connections including priority packets for sending high priority packets with a given successful decoding probability; and

control an interference in the network such that the quality of service for at least one connection including high priority packets has at least an estimated value.